

REMARKS

Claims 9, 19 and 20 have been amended. Claim 18 has been canceled. Claims 1-3, 5-17 and 19-21 are currently pending in this application. Applicants reserve the right to pursue the original and other claims in this and other applications. Applicants respectfully request reconsideration in light of the above amendments and the following remarks.

With respect to the Examiner's comments regarding the Information Disclosure Statement filed June 4, 2008, Applicants note that the U.S. patent corresponding to the non-English language German patent was submitted to the USPTO in the Information Disclosure Statement filed on June 27, 2008.

Claims 1, 3, 5, 7, 9-13, 16 and 21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Cosmescu (U.S. Patent No. 6,149,648) ("Cosmescu"). This rejection is respectfully traversed and reconsideration is respectfully requested.

Claim 1 recites an apparatus for coagulating tissue including an "electrode adapted to produce a high-frequency current," a "gas-delivering device having an outlet and being adapted to deliver an inert gas from said outlet into a space defined between said electrode and said tissue, such that a plasma is produced between said electrode and said tissue when said high frequency current is applied to said inert gas, wherein a distal end of said electrode projects out of said gas-delivering device" and a "guiding device disposed at said distal end of said electrode, said guiding device for directing and guiding at least one of said gas and said plasma such that at least a part of said gas and plasma is diverted in a predetermined direction."

Applicants respectfully submit that Cosmescu does not disclose, or render obvious, all of the limitations of claim 1. Specifically, Applicants submit that Cosmescu does not disclose the claimed "guiding device disposed at said distal end of said electrode" wherein said guiding device is adapted to direct and guide "at least one of said gas and said plasma such that at least a part of said gas and said plasma is diverted in a predetermined direction." The Examiner relies on the "enlarged portion of electrode 112/436 [and the] ball shape at [the] end of [the] electrode

in figure 8D” as disclosing the claimed guiding device. Office Action, pg. 3. Applicants respectfully disagree.

Applicants note that the ball shaped electrode 440 of Figure 8D in Cosmescu is only disclosed in combination with the electrosurgical unit of Figure 8. This electrosurgical unit does not use argon-plasma beams to enhance the coagulation process. Cosmescu clearly differentiates between the electrosurgical unit pencil apparatus 402 (of Figure 8), and the electrosurgical unit-argon beam coagulator pencils 502 and 602. See, Cosmescu, col. 11, lines 21-25. The embodiment shown in Figures 8A to 8G of Cosmescu fails to disclose a guiding device as claimed, since there is no plasma for diversion. Further, such a guiding device used with an argon plasma flow would contravene the inventive concept of Cosmescu. Since it is the objective of Cosmescu to “provide a smoke evacuator that functions effectively irrespective of the distance between the operation tip of the electrode and the hand piece of the electrosurgical unit pencil” (Cosmescu, col. 2, lines 6-10), using the electrode 440 of Figure 8D in combination with an argon plasma beam, would lead to a device wherein the argon plasma beam would be immediately sucked in by the smoke evacuator.

The Examiner also refers to the “enlarged portion” of electrode 112, shown in Figure 6A, as disclosing the guiding device. Office Action, pg. 3. At first sight, it appears that, there is an enlarged portion is at the distal tip of the electrode 112 (as shown in Figure 6A). However, looking closely at Figure 5 of Cosmescu shows the same electrode 112 without the enlarged portion at the distal end/tip, but instead includes an enlarged portion near the proximal end at socket 108. Furthermore, it should be noted that an enlarged part beginning after the mouth 154 of the electrosurgical device would be quite problematic when used in combination with the smoke evacuator of D1. This seemingly inconsistent disclosure resolves itself when the description is studied in more detail. As discussed in column 5 of Cosmescu, Figures 5, 6B and 6C each show cross-sections of the electrosurgical argon beam coagulator pencil, while Figure 6A is a “side view” thereof. In other words, Figure 6A is rotated 90 degrees from the cross-

sectional views shown in Figures 5, 6B and 6C. Thus, the shape of electrode 112 is actually as shown in the below illustrations (prepared by Application for illustrative purposes):

Fig. 1 (side view of electrode 112)



Fig. 2 (cross-section view of electrode 112)



Fig. 3 (front view of electrode 112)



It is clear from these clarifying illustrations that electrode 112, cannot disclose the claimed guiding device to divert plasma flow. Accordingly, Applicants respectfully submit that claim 1 is not disclosed, or rendered obvious, by Cosmescu.

Claim 9 recites an apparatus for coagulating tissue including a “gas-delivering device,” an “electrode disposed substantially coaxially with the gas-delivering device and configured to generate a high-frequency current, wherein a distal end of the electrode projects outward through an outlet of the gas-delivering device” and a “guiding device disposed at the distal end of the electrode.” Further, the “guiding device is configured for guiding an inert gas stream flowing through the gas-delivering device [and] is comprised of a material that is electrically insulating and thermally stable.”

Claim 9 has been amended to incorporate the subject matter of canceled claim 18. As admitted by the Examiner, Cosmescu does not disclose that the guiding device is electrically insulating. Office Action, pg. 8. The Examiner relies on LaFontaine et al. (U.S. Patent No. 5,902,328) (“LaFontaine”) (in the rejection of claim 18) as disclosing this claim feature. Id. Applicants respectfully submit that the cited references are not combinable in the manner

asserted by the Examiner to disclose that the “guiding device” is comprised of a material that is “electrically insulating and thermally stable.” The Examiner asserts that “it would have been obvious to one of ordinary skill in the art … to manufacture the enlarged portion of electrode 112/[436] of Cosmescu out of a thermally stable and electrically insulating material as in LaFontaine.” Office Action, pgs. 8-9. Applicants respectfully disagree. Even assuming the electrode tip of Cosmescu could be considered a “guiding device” as claimed (which Applicants do not concede), one skilled in the art would not be motivated to make the electrode tip of Cosmescu out of an insulating material because this portion of the electrode serves important functions, such as cutting (see, e.g., col. 10, lines 61-67, element 436 is a “blade tip”) and would not properly function for its intended purpose if formed of an electrically insulating material. Accordingly, Applicants respectfully submit that claim 9 is allowable over the cited combination for at least this reason.

Accordingly, Applicants respectfully submit that claims 1 and 9 are allowable over the cited combination. Claims 3, 5, 7 and 21 depend from claim 1 and are allowable along with claim 1. Claims 10-13 and 16 depend from claim 9 and are allowable along with claim 9. Applicants respectfully request the rejection of claims 1, 3, 5, 7, 9-13, 16 and 21 be withdrawn and the claims allowed.

Claims 8 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cosmescu. This rejection is respectfully traversed and reconsideration is respectfully requested.

Claims 8 and 17 depend from claims 1 and 9, respectively, which are allowable over Cosmescu (in combination with LaFontaine) for at least the reasons discussed above. Additionally, Applicants respectfully submit that Cosmescu does not, in fact, render obvious, that the “electrode is movable relative to said outlet such that when said electrode is moved into a retracted position said guiding device closes said outlet in a substantially leakproof manner” as recited in claim 8, or that “when the electrode is in a fully retracted state, the guiding device is seated on the outlet of the gas-delivering device” as recited in claim 17. The Examiner asserts that “it would have been obvious to one of ordinary skill in the art in view of the shapes of the

electrodes shown in figures 6A and 8C-D and their respective arrangements with tube 152 and mouth 154 of the embodiment of figure 5, that if the electrode was fully retracted, the outflow would be sealed/leakproof due in part to the shape of the electrode interacting with the taper on the mouth 154.” Office Action, pg. 6. Applicants respectfully disagree. In fact, Cosmescu explicitly teaches that the opening *is not* sealed by the electrode. As described in Cosmescu, in an operation mode where apparatus 121 is used “purely as an argon-beam coagulator,” “the nozzle assembly 111 is moved out to cover the tip of the electrode” (e.g., the electrode is fully retracted) and “mouth 154 of the conduit 152 becomes the distal tip of the whole ESU-argon beam coagulator. This allows the argon beam to be released very close to the site of the procedure, thereby maximizing the efficiency of the argon beam.” Cosmescu, col. 14, line 59 – col. 15, line 4. In other words, when the electrode is fully retracted, the opening must still be available for the argon beam to flow through, and thus *cannot* be “substantially leakproof” or “seated on the outlet of the gas-delivering device” as claimed. Accordingly, Applicants respectfully submit that claims 8 and 17 are allowable over Cosmescu for this additional reason. Applicants respectfully request the rejection be withdrawn and the claims allowed.

Claims 2, 6, 14, 15 and 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cosmescu in view of LaFontaine. This rejection is respectfully traversed and reconsideration is respectfully requested.

Claims 2 and 6 depend from claim 1, which is allowable over Cosmescu for at least the reasons discussed above. LaFontaine is relied upon as disclosing that the guiding device is electrically insulating and the claimed configuration of the guiding device (Office Action, pgs. 6-7) and does not remedy the deficiencies of Cosmescu as to claim 1. Further, with respect to claim 2 and as discussed above with respect to claim 9, the combination of LaFontaine’s electrically insulating guiding device with the electrode portion of Cosmescu is not a valid combination. Accordingly, Applicants respectfully submit that claims 2 and 6 are allowable over the cited combination.

Claims 14, 15 and 19 depend from claim 9, which is allowable over the cited combination for at least the reasons discussed above. Further, with respect to claims 14 and 15, Applicants disagree that the surface of the deflecting body 100 of LaFontaine can be relied upon by the Examiner as disclosing *both* the claimed “flattened surface” of claim 14 and the “substantially hemispherical surface” of claim 15. See, Office Action, pgs. 7-8. The deflecting body’s 100 surface *cannot* be both flat *and* hemispherical at the same time. Accordingly, Applicants respectfully submit that claims 14, 15 and 19 are allowable over the cited combination.

Claim 18 has been canceled and its subject matter incorporated into claim 9. The rejection of claim 9 over the combination of Cosmescu and LaFontaine is discussed above.

Claim 20 recites an argon plasma coagulating probe assembly including a “tube,” an “electrode disposed substantially coaxially with the tube and configured to generate a high-frequency current, wherein a distal end of the electrode projects outward through an outlet of the tube” and a “guiding device disposed at the distal end of the electrode, wherein the guiding device is configured for guiding an inert gas stream flowing through the tube.” Further, the “guiding device is comprised of an electrically insulating and thermally stable material and is configured to have a concave configuration on a side thereof that faces the outlet and is further configured to prevent mechanical damage if the guiding device touches the tissue” and the “electrode is movable relative to said outlet such that when said electrode is moved into a retracted position said guiding device closes said outlet in a substantially leakproof manner.”

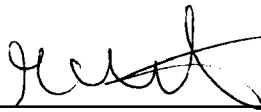
For at least the reasons discussed above with respect to claims 8 and 9, Applicants respectfully submit that the cited combination of references does not disclose at least that the “electrode is movable relative to said outlet such that when said electrode is moved into a retracted position said guiding device closes said outlet in a substantially leakproof manner” or that the “guiding device is comprised of an electrically insulating and thermally stable material,” respectively, as recited in claim 20. Accordingly, Applicants respectfully submit that claim 20 is allowable over the cited combination.

Applicants respectfully request that the rejection of claims 2, 6, 14, 15, 19 and 20 be withdrawn and the claims allowed.

In view of the above, Applicants believe the pending application is in condition for allowance.

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Respectfully submitted,

By 
Gianni Minutoli
Registration No.: 41,198
Jennifer M. McCue
Registration No.: 55,440
DICKSTEIN SHAPIRO LLP
1825 Eye Street, NW
Washington, DC 20006-5403
(202) 420-2200
Attorneys for Applicants